

testo 551 • testo 555 testo 556 • testo 560

# **Electronic Manifolds**

Measuring, Recording and Regulating Refrigeration Systems



testo 551

testo 555

## Vacuum measurement

The absolute pressure meter achieves high-precision measurements during the evacuation of refrigeration systems. The display shows not only the measured vacuum but also the corresponding sublimation and steam temperature of water.

- High precision vacuum measurement cell with 6 bar positive pressure protection
- Storage and display of the performance data of up to 9 vacuum pumps on the unit display
- Recording of measured data in the unit and reading out data on the unit display
- Stainless steel sensor for media compatibility
- Resolution of 0.0001 bar
- Temperature compensation



#### testo 551

Vacuum measurement meter with batt. and stainless steel pressure sensor

Part no. 0560 5510

Technical data testo 551		
Pressure media CFC, fluorinated hydrocarbo ammonia (NH <sub>3</sub> )		
Meas. range	0200 hPa/mbar (abs.)	
Pos. pressure	Max. 6 bar permitted	
Resolution	0.0001 bar	
Internal memory	8 KB as wrap-around memory (3610 values)	
Connection	1 x 7/16" - UNF	
See rear page for remaining data		

# Calculation of condensation and vapourisation temperatures

The electronic manifold with 3way valve bank and 2 pressure sensors is the ideal tool for service and maintenance work on refrigeration systems.

- At a glance: display of measured pressure on suction and pressure side including the calculated condensation and vaporisation temperatures for the selected refrigerant
- Temperature-compensated
- 35 refrigerants stored in device
   update capability for known and new refrigerants
- Data recording, readout from memory via the unit display
- Display of calculated Carnot / Lorenz cooling/heating output figures
- Display of saturated steam values of all refrigerants stored in the device
- Switch-selectable display: relative or absolute pressure

Recommended kit: "Starter

#### testo 555-1 (Brass)

Electronic manifold made of brass with battery

Part no. 0560 5551

### testo 555-2 (Stainless steel)

Electronic manifold made of stainless steel with battery

Part no. 0560 5552

Technical data testo 555-1/-2		
Pressure media CFC, fluorinated hydrocarbon, nitrogen (ammonia, testo 555-2 only)		
Meas. range 0 to 50 bar (abs.)		
Pos. pressure	Up to 75 bar	
Resolution	0.1	
Internal memory	8 KB as wrap-around memory (3610 values)	
Connection	3 x 7/16" - UNF	
No. of refrigerants	35	
See rear page for remaining data		

#### Recommended kit: "Vacuum and temperature measurement"



Pipe wrap probe with Velcro tape for 6mm pipes and above

testo printer with 1 roll of thermal paper and 4 AA batteries

Transport case (plastic) for measuring instrument and accessories

Robust, affordable air probe

TopSafe for testo 935

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Item	Part no.
testo 555-1, brass	0560 5551
testo 555-2, stainless steel (for ammonia)	0560 5552
testo 935, to measure differential temperature	0560 9350
Pipe wrap probe with Velcro tape for 6mm pipes and	above 0628 0020
Pipe wrap probe with Velcro tape for 6mm pipes and	above 0628 0020
testo printer with 1 roll of thermal paper and 4 AA bat	teries 0554 0545
TopSafe for testo 935	0516 0183
Transport case (plastic) for meter and accessories	0516 0184
Brass	Stainless steel

0628 0020

0602 1792

0554 0545

0516 0183

0516 0184

testo 560

esto

## Calculation of superheating, subcooling and easy, rational data management

The electronic manifold with 3way valve bank and 2 pressure sensors also has 2 temperature inputs for external temperature probes. Superheating and subcooling are calculated at the push of a button and shown on the display.

- All functions of the testo 555
- Measurement of two
   temperatures simultaneously
- Leakage test taking into account ambient temperature by means of the connection of an external temperature probe
- External memory chip for onsite documentation of historical and current system data:
  - Rapid overview of all relevant machine data
  - System history
  - Simplified troubleshooting



testo 556

#### testo 556-1 (Brass)

Electronic manifold made of brass with battery

Part no. 0560 5561

#### testo 556-2 (Stainless steel)

Electronic manifold made of stainless steel with battery

Part no. 0560 5562

lechnical data testo 556-1/-2		
Pressure media nitrogen (ammor	CFC, fluorinated hydrocarb nia, testo 556-2 only)	
Measurement	Pressure 0 to 50 bar (abs.	

range	Temperature -50 to +400 °C	
Pos. pressure	Up to 75 bar	
Resolution	0.1	
Internal rnemory	8 KB as wrap-around memory (3610 values)	
Interface	For external memory chip, 2 temperature inputs	
Connection	3 x 7/16" - UNF	
No. of refrigerants	35	
See rear page for remaining data		

#### Recommended kit: "Maintenance and Service"



## Vacuum measurement, calculation of all parameters and analysis of data on PC

The electronic manifold with 3way valve bank is the ideal solution for the commisioning, maintenance and repair of refrigeration systems. Highprecision measurements are achieved during the evacuation of refrigeration systems.

- All functions of the testo 556\*
- Data exchange with PC
- Internal Pt1000 temperature sensor, e.g. for recording ambient temperature during leakage tests
- Network connections for longterm measurements
- Internal memory with 256 KB and comprehensive customer and system management
- PC software for analysis and documentation
- The testo 560 has an external temperature input and has no connection possibility for the external memory chip.



#### testo 560-1 (Brass)

Electronic manifold made of brass with battery

Part no. 0560 5601

#### testo 560-2 (Stainless steel)

Electronic manifold made of stainless steel with battery

Part no. 0560 5602

Technical data testo 560-1/-2		
Pressure media CFC, fluorinated hydrocarbon, nitrogen, (ammonia, testo 560-2 only)		
Measurement range	Pressure 0 to 50 bar (abs.), Vacuum 0 to 200 mbar (abs.) Temp100 to +400 °C	
Pos. pressure	Up to 75 bar	
Resolution	Pressure 0.1 bar Vacuum 0.0001 bar	
Memory Stores	<ul> <li>&gt; 10,000 data records</li> <li>&gt; 32,000 data records</li> <li>equals 100,000 readings</li> </ul>	
Interface	RS232	
Connection	3 x 7/16" - UNF	
No. of refrigerants	Max. 38	
See rear page for remaining data		

#### Recommended kit: "Refrigeration engineer"



nom	Turcho.
testo 560-1, with manometer battery, vacuum cell, temperature input and data management, brass	0560 5601
testo 560-2, with manometer battery, vacuum cell, temperature input and data management, stainless steel	0560 5602
Pipe wrap probe with Velcro tape for 6mm pipes and above	0609 5600
PC software for data management and documentation	0554 5600
RS-232 cable for data transmission between meter and PC	0628 0178
Mains unit for external voltage supply	0628 1084
Transport case for meter and accessories	0516 0008

Brass

**Stainless steel** 

## Ordering by fax

Ordering data for meters/recommended kits			
Qty. Mo	eters	Part no.	
te	sto 555-1, brass, with manometer battery	0560 5551	
te: wi	<b>sto 555-2</b> , stainless steel (also for ammonia), th manometer battery	0560 5552	
te: tei	<b>sto 556-1</b> , brass, with manometer battery, nperature input, external memory chip	0560 5561	
te: wi ex	sto 556-2, stainless steel (also for ammonia), th manometer battery, temperature input, ternal memory chip	0560 5562	
te: va	<b>sto 560-1</b> , brass, with manometer battery, cuum cell, temperature input and data management	0560 5601	
te: wi an	sto 560-2, stainless steel (also for ammonia), th manometer battery, vacuum cell, temperature input d data management	0560 5602	
te	sto 551, vacuum meter	0560 5510	
te	sto 935, to measure differential temperatures	0560 9350	
Qty. Re	commended kits	Contents	
te	sto 551 "Vacuum and temperature measurement"	See page 2	
te	sto 555-1 "Starter" (Brass)	See page 2	
te	sto 555-2 "Starter" (Stainless steel)	See page 2	
te	sto 556-1 "Maintenance and service" (Brass)	See page 3	
te	sto 556-2 "Maintenance and service" (Stainless steel)	See page 3	
te	sto 560-1 "Refrigeration engineer" (Brass)	See page 3	
te	sto 560-2 "Refrigeration engineer" (Stainless steel)	See page 3	

Ordering data for Accessories/Probes		
Otv.	Accessories for testo 556-1/-2	Part no.
	Software for memory chip	0554 5601
	Interface cable for connection: Unit to memory chip	0628 5600
	Serial interface cable for connection: PC to memory chip	0409 5600
	Machine rating plate incl. memory chip	0554 5507
Qty.	Accessories for testo 560-1/-2	Part no.
	PC software for data management and documentation	0554 5600
	RS-232 cable for data transmission between meter and PC	0628 0178
	Mains unit for external voltage supply for testo 560	0628 1084
Qty.	Common accessories	Part no.
	Transport case for meter and accessories	0516 0008
Qty.	Accessories for testo 935	Part no.
	testo printer with 1 roll of thermal paper and 4 AA batteries	0554 0545
	TopSafe for testo 935	0516 0183
	Pipe wrap probe with Velcro tape for 6 mm pipes and above	0628 0020
Qty.	Probes for testo 556 and testo 560	Part no.
	Water-proof immersion/penetration probe, -50 to +400 °C, Class A	0628 1272
	110 mm 30 mm Ø 4 mm Ø 32 mm	
	Water-proof surface probe with widened measuring tip, for flat surfaces, -50 to +400 °C, Class B	0628 1972
	110 mm (1)	
	Robust, affordable air probe, -50 to +400 °C, Class A	0628 1772
	110 mm (FT)	
	Pipe wrap probe with Velcro tape for Ø 6 mm pipes and up to max.120 mm, Tmax +120 °C, 0 to +120 °C, Class B	0609 5600
	395 mm 20 mm	
	If ordering replacement sensors for old devices from the company acdoor, PCD 312, please order adapter as well.	0554 5603

## Sender

Company\_\_\_\_\_\_Sector\_\_\_\_\_\_Department, Function\_\_\_\_\_\_Name\_\_\_\_\_Address\_\_\_\_\_

Please send me the detailed brochure with the title "Electronic Manifolds" (DIN A4, 16 pages)

Accuracies of Pt100 probes

Class B:  $\pm (0.3 + 0.005 \bullet \text{Itl})$ Class A:  $\pm (0.3 + 0.005 \bullet \text{Itl})$ 

Email \_\_

Tel, Fax\_

Date, Signature

## Fax to:

Common technical data		
Dimensions	175 x 109 x 34 (lxwxh)	
Protection class IP 65		
Accuracy	0.5% FS ± 1 digit	
Compensation	-10 to +50 °C	
Battery	9V block	
Battery capacity	Approx. 40 h	
Separating membrane Stainless steel 316 L		
Working, storage temp20 to +60 °C		
Warranty	2 years	